

REMARKS

This communication responds to the Final Office Action mailed on May 12, 2008. Claims 1, 8, 14, 19, and 22 are amended, claims 6, 7, 11, are canceled (please note the claim 18 was canceled in a previous amendment), and no claims are added herein. As a result, claims 1-5, 8-10, 12-17, and 19-26 are now pending in this Application.

§103 Rejection of the Claims

Claims 1-14, 16-18 and 22-26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Shattil (U.S. 2004/0086027; hereinafter “Shattil I”) in view of Priotti (U.S. 2004/0120410; hereinafter “Priotti”). Since claims 7, 11, and 18 have been canceled, the rejection of these claims is moot.

Claim 15 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Shattil I in view of Priotti and further in view of Shattil (U.S. 2002/0150070; hereinafter “Shattil II”). Claims 19-21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Shattil I in view of Shattil II and Schill et al. (U.S. 2003/0227985; hereinafter “Schill”). Applicant reserves the right to swear behind these references at a later date. Applicant respectfully traverses the rejection of these claims under 35 USC § 103(a) for the reasons stated below.

In order for the Examiner to establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Applicant respectfully submits that the Office Action did not establish a *prima facie* case of obviousness, because, even when combined, the cited references do not teach or suggest all the claim limitations set forth in the rejected claims.

In order to expedite prosecution, and not for reasons related to patentability, the guard band time interval is now claimed as a measure of asynchronous behavior in each of the independent claims. This amendment is fully supported by the Application as-filed, at paragraph [0010]. Thus, no new matter has been added. For example, amended claims 1 and 8 each recite:

... **converting a combined plurality P of asynchronous data streams received at substantially the same time from a first time domain to a frequency domain;**

separating the combined plurality P of asynchronous data streams into a separated plurality of data streams in the frequency domain;

converting the separated plurality of data streams from the frequency domain to a second time domain; and

synchronizing at least one of the separated plurality of data streams in the second time domain,

wherein the at least one of the separated plurality of data streams is formatted according to one of an Institute of Electrical and Electronics Engineers 802.11 standard or an Institute of Electrical and Electronics Engineers 802.16 standard, and **wherein the asynchronous data streams are out of synchronism by a time period greater than an allowed guard band time period.**
(Emphasis added)

Independent claims 14, 19, and 22 include similar limitations. That is, the activities recited include (a) converting asynchronous streams from a first time domain to a frequency domain, (b) separating the streams in the frequency domain, (c) converting the separated streams from the frequency domain to a second time domain, and (d) synchronizing one or more of the streams in the second time domain.

First, the Office admits that “Shattil fails to teach synchronizing at least one of the separated plurality of data streams in a second time domain” (i.e., (d) above) as recited in each of the independent claims. The Applicant submits that Shattil I also fails to disclose “**converting ... asynchronous data streams received at substantially the same time from a first time domain to a frequency domain ... wherein the asynchronous data streams are out of synchronism by a time period greater than an allowed guard band time period ...**” (i.e., (a) above). That is, the Office does not point out, and Applicant was unable to find any parts of any parts of Shattil I (e.g., portions cited by the Office, including Figures 4I, 4J, 10B, and paragraphs [0016], [0134] ... [0138]) that disclose receiving data streams that are out of synchronism by a time period greater than the allowed guard band time period.

In addition, there is no evidence that indicates Shattil I teaches successful SDMA uplink communication (or any other kinds of communication, including multipath fading

communication) under the claimed conditions. Thus, it is improper for the Office to justify its conclusion that the Shattil's system is effectively asynchronous by arguing that the system of Shattil supports SDMA as stated in paragraph [037] of Shattil I.

Second, contrary to what is asserted by the Office, Priotti does not teach anything like the activities claimed by the Applicant. As seen in FIG. 1 of Priotti, data symbols 101 are converted from the frequency to the time domain via IFFT 114 within a *transmitter* 102. Further the symbols 101 do not constitute a plurality of data streams. Thus, there is no "plurality P of asynchronous data streams received at substantially the same time" available to convert, as claimed by the Applicant.

Although claims during examination should be interpreted as broadly as their terms reasonably allow, the *Hyatt* court states that "during examination proceedings, claims are given their broadest reasonable interpretation consistent with the specification." *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000) (citing *In re Graves*, 69 F.3d 1147, 1152 (Fed. Cir. 1995) (emphasis added)).

The interpretation of the phrase "plurality P of asynchronous data streams received at substantially the same time" proffered by the Office (i.e., data symbols 101 converted within a transmitter being the same as receiving asynchronous data streams, wherein the streams are not synchronized based on the guard band time interval) is not reasonable, since it is different than what one of ordinary skill would understand it to mean. This is because one of ordinary skill in the art would understand receiving to occur by a receiver – not a transmitter.

This interpretation is also not consistent with the specification, since the conversion described by the Applicant occurs after reception, and not before, as taught by Priotti. Thus, Priotti simply does not operate in the claimed manner. Therefore, the attempt by the Office to characterize Priotti as teaching the claimed activities of "converting a combined plurality P of asynchronous data streams received at substantially the same time from a first time domain to a frequency domain" and later "synchronizing at least one of the separated plurality of data streams in the second time domain" is beyond that which should be reasonably allowed, and the rejection under 35 USC § 103(a) is improper.

Third, the Office does not point out, and the Applicant was unable to find any teaching within the bounds of Shattil II or Schill that discloses these missing elements. Thus, even

combined, Shattil I, Priotti, Shattil II, and Schill do not teach or suggest all the recited claim elements.

In summary, no combination of Shattil I, Priotti, Schattil II, and Schill remedies the deficiencies of Shattil I. Accordingly, the Office has not properly established a *prima facie* case of obviousness with respect to independent claims 1, 8, 14, 19, and 22. The Applicant thus respectfully requests reconsideration and allowance of independent claims 1, 8, 14, 19 and 22, and their dependent claims 2-5, 9-10, 12-13, 15-17, 20-21 and 23-26, since any claim depending from a nonobvious independent claim is also nonobvious. See M.P.E.P. § 2143.03.

CONCLUSION

The Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone the Applicant's representative at (210) 308-5677 to facilitate prosecution of this Application. If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

SCHWEGMAN, LUNDBERG & WOESSNER, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(210) 308-5677

By Mark V. Muller
Mark V. Muller
Reg. No. 37,509